Meeting Agenda

6:30 AM: Breakfast
6:45 AM: Call to Order (Megan Wolf, MD)
6:47 AM: Introductions (All)
6:55 AM: Committee Updates and Accomplishments (Megan Wolf, MD) (Page 2)
7:15 AM: Subcommittee Reports
- **AAOS Now** (Peter Mittwede, MD / Tim Tan, MD) (Page 4)
- **Survey** (Michelle Phelps, MD, PhD / Adam Wegner, MD, PhD) (Page 5)
- **Project Review** (Leonard Buller, MD) (Page 10)
- **Research Roadmap** (Takashi Hirase, MPH)
  - Proposal (Page 11)
  - Orthopaedic Forum - *The Pursuit of Scholarship: Why We Should Care About Resident Research* (Page 19)
- **Webinars** (Vahid Entezari, MD)
  - Update (Page 25)
  - Outlines (Page 26)
- **Delegate Communication** (Megan Wolf, MD)
7:45 AM: 2018/2019 Goals (All)
8:00 AM: Adjourn

**Resident Assembly Information:**
- Resident Assembly Committee Charges – All (Page 32)
- RARC Committee Roster (Page 35)
- RARC Committee Member Disclosures (Page 47)

**Informational Items:**
- AAOS Mandatory Disclosure Policy (Page 50)
- Antitrust Reminder (Page 56)
- AAOS Strategic Plan (Page 60)
- AAOS Code of Ethics (Page 61)
- Future AAOS Meetings 2018-2021 (Page 62)
- 2019 AAOS Annual Meeting Flyer (Page 63)
Annual Objectives:

1. To promote research opportunities available to residents, including:
   a. Awards, grants, and sub-specialty research activities
2. To promote the value of orthopaedic research among the orthopaedic resident community.
3. To develop, refine and present research actions to the executive committee.

2017-2018 Goals:

1. To encourage involvement of members within the committee
   a. Develop member-led subcommittees to develop and improve projects
   b. To utilize video conferencing to encourage member participation
   c. Use the AAOS Community
2. To develop and refine content for the Resident Research Toolkit
3. To promote resources to residency programs through grassroots programs and coordination with the Resident Delegates of the AAOS Resident Assembly
4. To host two webinars and identify topics and create content for two additional webinars
5. To submit two articles to AAOS Now and identify topics and create content for two additional articles
6. Resident committee study

Annual Accomplishments:

Goal #1: To encourage involvement of members within the committee

- Six subcommittees were created at the beginning of the year, each with a leader and additional participants. This has allowed for residents within the subcommittees to have primary leadership over specific projects and allow for more involvement.
  1. AAOS Now
  2. Survey Unit
  3. Project Review
  4. Research Roadmap
  5. Webinars
  6. Delegate Communication
- Video conferencing was utilized for 2 meetings; however, due to limited time available, this was changed to voice conferencing. However, we have set up AV for the Annual Meeting to allow for those unable to attend to virtually attending the meeting at the Annual Meeting.
- AAOS Community was utilized by the Research Committee as a resource for central material availability as well as communication until it was discontinued by the AAOS.

Goal # 2: To develop and refine content for the Resident Research Toolkit

- The Research Roadmap subcommittee surveyed the committee and designed an alternate presentation of the Research Roadmap, which will hopefully allow residents to use more effectively. This has been implemented on the website.

Goal # 3: To promote resources to residency programs through grassroots programs and coordination with the Resident Delegates of the AAOS Resident Assembly
The executive committee had a conference call at the beginning of the year with the Resident Delegates. However, we were unable to maintain contact or grassroots programs within the Research Committee.

Goal #4: To host two webinars and identify topics and create content for two additional webinars

- Completed:
  1. “How to Write a Publishable Manuscript”—September 6, 2017
  2. “Evidence-Based Orthopaedics”—September 14, 2017
- Ideas for new webinars:
  o High quality research output?
  o Further ideas to be discussed during Annual meeting
- Identify ways to archive previous webinars so that they may be referred to on the website (AKA within the Research Roadmap). (Vimeo)

Goal #5: To submit two articles to AAOS Now and identify topics and create content for two additional articles

- 5 articles have been written and/or planned, but will need to discuss with AAOS Now editor as to when we should submit.
  1. Complete—“How to Take Advantage of Protected Research Time.”
  2. In process:
     ▪ “Evidence-Based Orthopaedics”
     ▪ “How to Write a Publishable Manuscript”
     ▪ “Resident Research—How to Get it Done”
     ▪ “Resident Research—Challenges and Opportunities”

Goal #6: Resident committee study

- “The association of residency program resources with resident scholarly activity”
  1. IRB has been submitted and under review
  2. Will send out survey to program directors the week before Academy meeting
  3. CORD representatives are making a plug to the Residency Directors at the Academy meeting
- Next step is to coordinate new survey studies with other committees.

Other Accomplishments:

1. Project Review Subcommittee
   - Established coordination with CORR editors to allow for Resident Reviewers in the Journal, which will be acknowledged.
   - One article with Dr. Lisa Cannada has been reviewed.
   - Created a database of residents within the Research Committee who are interested in reviewing.
**AAOS Now Subcommittee**

**Articles Written**

1. “How to Take Advantage of Protected Research Time in Residency”—Jonathan D. Hughes MD, Peter Mittwede MD PhD
2. “Resident Research: What Not to Do”—Cecilia Belzarena MD

**Articles Planned**

1. “Resident Research: Quality vs. Quantity”—Daniel London MD MS
2. “Evidence-Based Orthopaedics”—Vahid Entezari MD
3. “How to Write a Publishable Manuscript”—Megan Wolf MD
4. “Resident Research—How to Get it Done”—Vahid Entezari MD
5. “Resident Research—Challenges and Opportunities”—Vahid Entezari MD, Megan Wolf MD, Jonathan Hughes MD
The association of residency program resources with resident scholarly activity

Background:
The Accreditation Counsel for Graduate Medical Education (ACGME) now requires that residency programs promote, track, and report residents’ scholarly activities. Residents are required to participate in at least one scholarly activity during their training including 1) participating in sponsored research, 2) preparation of an article for a peer-reviewed publication, 3) presentation of research at a regional or national meeting, or 4) participation in a structured literature review of an important topic. Towards this end, programs must provide curricula to teach residents the basics of conducting research and should allocate adequate educational resources to facilitate resident involvement in scholarly activity.

Several studies have reported the impact of multimodal approaches on increasing resident research participation within individual medical and surgical residency programs. These studies have suggested that scholarly activity may be increased, for example, through multimodal approaches that may include revision of the research curriculum, appointing a resident research director, providing research funding, and providing protected time. Few studies, however, have investigated the association of specific educational resources with scholarly productivity across a few or across all orthopaedic residency programs.

Research Objective:
The purpose of this study is to evaluate which residency program educational resources are predictive of orthopaedic resident scholarly activity.

Study Design:
A retrospective, cross-sectional study will be conducted of all 158 ACGME-accredited U.S. orthopaedic surgery residency programs.

Program Director Survey
A survey will be conducted of all members of the American Orthopaedic Association’s Council of Orthopaedic Residency Directors (CORD). Program directors will be contacted via email to request their participation in the study (requests and follow-up emails distributed via AAOS survey coordinator). The survey will include questions regarding research-related resources provided (Table I), faculty characteristics (Table II), and tracked resident scholarly activity (Table III) during the academic year 2015-2016.

Analysis
Univariate and multivariate analysis will be utilized to evaluate for an association between program-related factors (independent variables) and resident scholarly activity (dependent variables).

Timeline
The survey will be emailed to faculty members just prior to the AAOS Annual Meeting. Additional reminders will be sent over the next 2-3 weeks.
### Table I. Research-related Resources (available in 2015-2016 academic year)

- Dedicated research associate/coordinator
- Statistics support
- Research staff available to write IRB protocols, collect data and/or assist with article submission
- Research Curriculum
- Required research-in-progress meetings
- Research mentor establishment (resident-initiated, assigned, other, not required)
- Internal departmental grant funding available to residents
- Dedicated research year
- Research-related incentives (awards, financial compensation)

### Table II. Faculty characteristics

- # full-time faculty
- Total # of faculty publications
- # of dedicated research faculty (non-clinical faculty)
- # of clinical faculty with >= 20% full-time equivalents (FTEs) of dedicated research time

### Table III. Resident Scholarly Activity***

- # residents
- # conference presentations (includes abstracts, posters, presentation at national/regional meetings)
- # chapters in textbooks
- # residents participating in research
- # teaching presentations (grand rounds/review of literature)

### References:

Survey Questions:

1. From 2013 to 2016, which of the following research-related resources did your residency program provide for residents? Please select all that applied for the entire 3-year period:
   - Dedicated research associate/coordinator
   - Research staff available to write IRB protocols for all orthopaedic residents regardless of funding
   - Research staff available to collect data for all orthopaedic residents regardless of funding
   - Research staff available to assist with manuscript preparation and/or submission for all orthopaedic residents regardless of funding
   - Dedicated statistics support for all orthopaedic residents regardless of funding
   - Dedicated lab space freely available for basic science research projects (e.g. musculoskeletal biology lab or biomechanics lab)
   - One or more dedicated research faculty (non-clinical faculty)
   - One or more clinical faculty with >= 20% full-time equivalents of dedicated research time
   - Funding for resident research presentations at conferences
   - Internal departmental grant funding available to residents
   - Mandatory research-in-progress meetings for residents (supervised by research coordinator or similar; please do not include semi-annual program director meetings)
   - Assigned faculty research mentor
   - Funded research year for one or more residents
   - Research-related incentives (research award, financial compensation, etc.)

2. From 2013 to 2016, which of the following topics were a part of the formal Research Curriculum at your program? Please select all topics to which formal didactic time was specifically dedicated (rather than covered through discussion of articles or less formal methods):
   - Experimental design
   - Bias and confounding
   - Statistics
   - Scientific writing (e.g. Grant writing; scholarly manuscript writing)
   - Local research resources/challenges (e.g. discussion of local IRB, local databases, how to get research support staff assistance)
   - Evidence-based medicine (how to apply research results to practice)
   - Research presentation skills
3. This section requires for you to upload reports from your ACGME online account. We would like to know your SCHOLARLY ACTIVITY and FACULTY DATA ACTIVITY for academic years 2015-2016 as listed in your ACGME online account.

Please log into your ACGME online account <link to ACGME log in here> and download the two reports (Excel format). After, please upload the two reports below. You may delete the resident/faculty names if you prefer. All individual and program-specific data will remain confidential.

- “Scholarly Activity” Report (Upload button)
- “Faculty Data” Report (Upload button)

4. Optional: Please list any other resources or curricular components that your program provides that you think may be of interest to other programs.

- (Open text box)

Thank you for your participation in this survey!
Email invite:

<Dr. Name>

The AAOS Resident Assembly would like to know what factors affect scholarly productivity of orthopaedic residents. This may help program directors in allocating the most effective resources to assist with resident research.

Please click on the link below to provide your feedback. It will take <time> minutes to answer the survey. There is minimal risk associated with participation in this survey study. To complete the survey, you will need access to your ACGME online account and the ability to upload documents.

We appreciate your response by <date>. If you have questions about the survey, email aaosresearch@aaos.org.

Thank you.

Michelle Phelps, MD, PhD; Adam Wegner, MD, PhD; Benjamin Williams, MD
On behalf of the Resident Scholarly Activity Subcommittee
AAOS Resident Assembly Research Committee
**CORR Resident Reviewer Program**

**Plan**

1. Mentor would adopt willing and able mentee(s) – history of publishing, scholarly and understand/agree to the plan here and principles above

2. Mentor and mentee then independently perform the review after setting basic goals and expectations – resident will use the CORR reviewer tool

3. Mentor and mentee then compares reviews and use this as a basis to discuss review principles and practicalities

4. Mentor then submits review as usual with some changes based on resident review if you feel appropriate; I WILL ACKNOWLEDGE residents name in Confidential to Editor
Research Roadmap: Update Proposal

AAOS Resident Assembly Research Committee
Residents must participate in scholarly activity by:

1. Participation in sponsored research
2. Preparation of an article for peer-reviewed publication
3. Presentation of research at regional or national meetings
4. Participation in structured literature review of an important topic.
Problem/Goal

• Residents in few trauma heavy programs with less emphasis on research may have little to no resources or guidance to developing high-quality research

• Goal: To develop guidance for residents with both limited and adequate research backgrounds to produce quality research with a long-term follow-up while providing resources necessary to accomplish this goal.
Current Research Roadmap

- Great resource, particularly for residents on research rotations looking for specific guidance
Proposal

• Develop a step-by-step timeline for residents to start and complete high-quality research with large sample size (n>60), long-term follow-up (>24 months), and other criteria for developing research with high level of evidence¹

• Emphasize that most projects should not take 5 years to finish and advocate having smaller projects

¹. Modified Coleman Methodology Score
Step 1: Plan Your Study
Checklists and standards for planning assistance during the design phase of your study

Step 2: Appraise Your Study
Assess potential risks of bias in your study design. Obtain IRB or IACUC approval. Begin collecting data.

Step 3: Data Analysis
Begin analyzing data. Compute simple results or link to tools for generating sample size, power, randomization, and complex data analysis.

Step 4: Prep Your Manuscript
Checklists to verify inclusion of standard study components prior to submission

Step 5: Submit Your Manuscript
Choose the most appropriate journal for submission. List of links to journal-specific criteria for submitting your study.

Proposal 1: Circular
Proposal 2: Timeline

Step 1: Plan Your Study
Checklists and standards for planning assistance during the design phase of your study.

Step 2: Appraise Your Study
Assess potential risks of bias in your study design. Obtain IRB or IACUC approval. Begin collecting data.

Step 3: Data Analysis
Begin analyzing data. Compute simple results or link to tools for generating sample size, power, randomization, and complex data analysis.

Step 4: Prep Your Manuscript
Checklists to verify inclusion of standard study components prior to submission.

Step 5: Submit Your Manuscript
Choose the most appropriate journal for submission. List of links to journal-specific criteria for submitting your study.

PGY 1  PGY 2  PGY 3  PGY 4  PGY 5

Sample Timeline
Research Roadmap

**Step 1: Fund Your Study**
IRB and grant quick-links, tips, and guides on approval and funding options for your study.

**Step 2: Plan Your Study**
Checklists and standards for planning assistance during the design phase of your study.

**Step 3: Appraise Your Study**
Assess potential risks of bias in your study design to support approval and data collection.

**Step 4: Analyze Your Data**
Compute simple results or link to free tools for generating sample size, power, randomization, and complex data analysis.

**Step 5: Prep Your Manuscript**
Checklists to verify inclusion of standard study components prior to submission.

**Step 6: Submit Your Manuscript**
List of direct links to criteria and conditions for submitting to the appropriate journal of choice.

The study appraisal forms are consistent with AAOS methodology and were developed using GRADE, QUADAS-2, and QUPS instruments. The study planning and manuscript preparation guides were independently designed but are consistent with the STARD, CONSORT, and STROBE study checklists.

If you have any questions, comments, or feedback, please feel free to contact Kyle Mullen Mullen@aaos.org or Ryan Pezold Pezold@aaos.org.
The Pursuit of Scholarship: Why We Should Care About Resident Research

Joan E. Bechtold, PhD, Benjamin R. Williams, MD, Stuart L. Weinstein, MD, David W. Polly, MD, Andrew J. Pugely, MD, Joseph A. Buckwalter, MD, MS, Stephen A. Albanese, MD, Kevin J. Bozic, MD, MBA, and Brian D. Snyder, MD, PhD

Abstract: Research is a foundational component of an orthopaedic residency. It fosters intellectual curiosity and pursuit of excellence, while teaching discipline and the scientific method. These are the key principles for careers in both community-based practice and academia. Currently, no consensus exists on how to best engage residents and support their research endeavors. In 2014, the American Academy of Orthopaedic Surgeons Board of Specialty Societies Research and Quality Committee convened a Clinician-Scientist Collaboration Workgroup. The workgroup’s task was to identify barriers to clinical and basic science research, and to propose feasible recommendations to overcome these barriers. Herein, we have compiled the opinions of various stakeholder constituencies on how to foster scholarly pursuits during an orthopaedic residency. These opinions reflect the workgroup’s conclusions that research is directly and indirectly influenced by funding, departmental support, and mentorship, and that early exposure and dedicated time to pursue scholarly activities may have a positive impact on lifelong research interests.

Engagement in scholarly activities is difficult for clinicians at all stages of their careers, yet clinician-scientists are key to advancing the medical field. Cultivating researched-focused surgeons is increasingly challenging, especially in the field of orthopaedics. Scholarship that starts early in a clinician’s career leads to increased academic interest and may improve quality and outcomes. In 2014, the American Academy of Orthopaedic Surgeons (AAOS) Board of Specialty Societies (BOS) Research and Quality Committee (Chair, John Kirkpatrick, MD) convened a Clinician-Scientist Collaboration Workgroup (Chairs, Joan E. Bechtold, PhD, and Brian D. Snyder, MD, PhD) that was tasked with identifying barriers to resident research, proposing feasible recommendations to overcome them, and promoting the findings to the broader orthopaedic community.

After the initial analysis, the workgroup developed an open-access webinar to share strategies that promote resident engagement in research, involvement in quality improvement studies, and collaboration between clinicians and basic scientists. In the years since the workgroup convened, these remain important and timely topics. This paper presents the opinions of various stakeholder constituencies regarding scholarly advancement. While we recognize that these recommendations may not be applicable to all orthopaedic residencies, we hope that they will benefit many programs, faculty, and residents.

Disclosure: On the Disclosure of Potential Conflicts of Interest forms, which are provided with the online version of the article, one or more of the authors checked “yes” to indicate that the author had a relevant financial relationship in the biomedical arena outside the submitted work and “yes” to indicate that the author had other relationships or activities that could be perceived to influence, or have the potential to influence, what was written in this work (http://links.lww.com/JBJS/E450).
The Importance of Scholarship to the Future of Orthopaedics: Stuart L. Weinstein, MD

Emphasizing scholarship during residency training is a mission that is critical to the future of musculoskeletal health care and our profession. Residents benefit from education in basic science and clinical research methodology. A critical mass of residents must devote a portion of their future practice to develop both mechanical and biological advances to bring changes from the laboratory bench to the bedside. Equally important, regardless of the practice setting, will be their ability to apply new research findings to clinical practice.

Additionally, “scholarship” must be broadened to include an understanding of health-care systems and how to affect change within them. We are in the midst of major health-care system reforms, and with the recent passage of MACRA (the Medicare Access and CHIP [Children’s Health Insurance Program] Reauthorization Act of 2015), the traditional fee-for-service payment of physicians rewarding “volume” is changing to align payment with “value.” Residents need a thorough understanding of these concepts to function in this new era. These future orthopaedic leaders will guide our profession in determining what value means in musculoskeletal care.

As educational demands increase in orthopaedic training, the leaders of our professional organizations and those of us who participate in the accreditation and certification bodies for orthopaedics must never lose sight of the importance of scholarly engagement to the future of our patients and our profession.

Perspectives of Stakeholders

Program Director/Department Chair Perspective: David W. Polly, MD

Research during orthopaedic residency is a requirement of the Accreditation Council for Graduate Medical Education (ACGME). Given the limited time and resources generally available to residents and programs, efficiency is essential. Research often follows a predictable process, and we provide our residents with a roadmap to guide them (Fig. 1). Doing so not only assists in allocating appropriate time for research, but also aids supervisors in identifying those who are struggling or need additional support.

Another critical factor to resident research success is faculty mentoring. Faculty must take an active role, recognizing the additional effort that is required to mentor residents through a project. Such mentorship is an important aspect of developing well-rounded residents and helps them to meet the mandatory requirements for residency completion; its goal is not simply increased output or faculty academic promotion.

![Fig. 1](https://example.com/fig1)

Resident research roadmap of yearly milestones. IRB = institutional review board, PGY = postgraduate year, and AAOS = American Academy of Orthopaedic Surgeons.
While guiding residents in quality research is challenging, it is a wonderful opportunity to share the joy of creating new scholarly knowledge. These successes (abstract acceptance, paper presentation, and, ultimately, publication) should also be publicly celebrated within the program.

**Resident Physician Perspective: Andrew J. Pugely, MD**

Learning surgical techniques is only one aspect of becoming a successful orthopaedic surgeon. Surgeons must have the skills to acquire new knowledge and incorporate technological advances into practice. As quality and value become national priorities and patients have increasing access to medical information, physicians must understand the changing health-care landscape. Additionally, for residents seeking fellowship training, scholarly work will enhance their application for competitive spots.

Residency is the last formal setting for many trainees to interact with academic mentors who are versed in the scientific process, so this should start as early as possible in the first postgraduate year (PGY1). Strong mentorship also will lead to higher satisfaction during the grueling residency process. Older residents, faculty, and departmental leadership should help PGY1 residents to connect with a dedicated mentor who has a proven history of successful mentorship and scholarship, and who will have adequate time, availability, and dedication to guide resident projects to fruition.

Residents should initially take on feasible, interesting projects (e.g., small database studies) because the slow progress and complexity of larger projects (e.g., new multicenter randomized controlled trials) initially may be discouraging due to the amount of time and labor that is involved. Working with a mentor to develop a project timeline will aid in moving the project along during the busy clinical activities of residency. Careful consideration should be given to each step of the process, with a goal of completion during PGY4, ideally before fellowship applications.

As they take on projects requiring more funds and personnel, residents may look for funding locally, regionally, and nationally; one example of funding is the Orthopaedic Research and Education Foundation (OREF), which offers $100,000 annually for resident research. Departmental funding for resident travel to research meetings is also key in allowing residents to share findings with the broader orthopaedic community, creating a sense of accomplishment and interest in additional research endeavors.

Overall, it is vital that the residency-training process equips young surgeons with the tools that are necessary to critically evaluate the scientific literature and to formulate and answer new scientific questions. This is most successfully accomplished by connecting residents to mentorship and support early on, helping them to find interesting but feasible projects, and developing a comprehensive timeline to ensure progress, despite the many other demands on their time.

**Journal Editor Perspective: Joseph A. Buckwalter, MD, MS**

Conducting original research is one of the best ways to learn critical thinking skills and the only effective way to learn the scientific method; it should be part of every orthopaedic resident’s education. The scientific method allows physicians to break from adherence to the dictates of historical authorities and traditions, to question accepted ideas and therapies, and to seek new knowledge by experimentation.

Residents benefit from diverse collaborative opportunities, including basic science, bioengineering, and translational investigations. Natural history studies, outcomes measures, or database research allow residents to ask and answer important questions. Residents may also enjoy investigating teaching strategies and educational models. Many institutions include departmental and institutional infrastructure that can support studies of clinical outcomes and prospective clinical studies. National databases (e.g., the National Cancer Institute [NCI]; the Surveillance, Epidemiology, and End Results Program [SEER]; and the American College of Surgeons National Surgical Quality Improvement Program [ACS NSQIP]) and current multicenter studies (e.g., the Multicenter Orthopaedic Outcomes Network [MOON]) give residents an opportunity to carry out multicenter research and collaborate with peers and mentors around the country.

Working with enthusiastic, thoughtful, and experienced investigators will teach residents to formulate questions that can be definitively answered with available resources and to develop the necessary skills to evaluate new information. Through mentoring relationships, residents will develop a well-rounded perspective and learn to integrate new developments into practice.

Preparring a manuscript stimulates researchers to identify the impact of their work and potential future research directions, improves inductive and deductive reasoning skills, and strengthens the ability to interpret and evaluate the medical literature. Publication in a peer-reviewed journal documents research accomplishments, disseminates results and ideas, and allows critical analysis by others; it should be a primary goal for resident research. Residents can consider a range of publication options, from peer-reviewed high-impact and subspecialty orthopaedic journals to open access and individual orthopaedic department journals.

Growth and improvement in orthopaedic practice depends on systematic data-based evaluations of current treatments, sustained progress in the basic scientific foundation of the specialty, translational research that leads to dramatic improvements in treatments, and prospective clinical studies that test the efficacy of surgical and nonsurgical therapies. There is no group more important to include in these efforts than residents. A wide range of opportunities exist that can give residents the satisfaction of contributing novel ideas to the field. Orthopaedic departments must commit to provide the time, the infrastructure, and the funds to support residents’ research, and foster a departmental culture that values and supports scientific inquiry. Although few residents will become clinician-scientists, instruction in the scientific method will support every future orthopaedic surgeon in acquiring new knowledge and making well-informed clinical decisions.
Board Certification Perspective Regarding Residency Training: Stephen A. Albanese, MD

The American Board of Orthopaedic Surgery (ABOS) is the certifying organization that evaluates the initial and continuing competence of orthopaedic surgeons. The rules and procedures for Part I of the certifying examination address research, with the requirement that the education of candidates includes exposure to the evaluative sciences, including clinical and/or laboratory research; however, the ABOS has no official position on resident participation in research projects.

According to the ACGME common program requirements, “the curriculum must advance residents’ knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care.” That “resident education must include instruction in experimental design, hypothesis testing, and other current research methods, as well as participation in clinical or basic research” is an orthopaedic-surgery-specific requirement. Orthopaedic residents must participate in at least one of the following: sponsored research, preparation of an article for a peer-reviewed publication, presentation of research at a regional or national meeting, or a structured literature review of an important topic. Program faculty members also are required to participate in scholarly activity.

Scholarly activity is an essential part of resident education for orthopaedic surgeons. It contributes to high-quality, up-to-date patient care, provides residents with the necessary skills for lifelong learning, and contributes to the development of future clinician-scientists.

Funding Agency Perspective (Adapted with Permission from a Webinar presented by Joan A. McGowan, PhD)

The National Institutes of Health (NIH), and specifically the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), is the primary source of funding for musculoskeletal research. Although the majority of NIH support is awarded postresidency, it is important to foster research interest throughout medical education. A minority of residents will continue on this path, but it is vital to nurture these individuals through excellent mentorship and exposure to quality research throughout early training, ensuring a robust pipeline of clinician-scientists.

Most surgical residents who pursue academic careers will look to NIH grants to support their research endeavors. Even those not directly involved will become consumers of the information in an effort to practice evidence-based medicine. Moreover, the advent and development of pragmatic effectiveness trials will engage many community-based surgeons and their patients in clinical research. Thus, all clinicians must understand the implications of research and have exposure to the methodology of research design.

The orthopaedic research programs supported by the NIH depend on research exposure during early academic training. Residency is an ideal time for physicians to develop interest, skills, and knowledge because the majority of programs are in an academic setting with access to mentorship and institutional support. Participation can and should be a standard component of the residency curriculum, and programs should support residents with a keen interest in scientific investigation. This will lead to a well-trained cadre of surgeons who are both consumers of the latest evidence and participants in the research enterprise.

Administration/Third-Party Payers: Kevin J. Bozic, MD, MBA

Payers are stakeholders who finance health-care services, including the Centers for Medicare & Medicaid Services, private insurance companies, state governments, and employers. Payers are interested in evidence that can inform policy-making, specifically in regard to safety, clinical efficacy and benefit, cost-effectiveness, and strength of evidence.

There is often a disconnect between research that clinicianscientists conduct and the evidence that payers need. AcademyHealth’s Listening Project evaluated one payer’s priorities through key informant interviews and meetings with Medicare officials. The Medicare officials desired more research into current health-care delivery structures and cost-effectiveness. They pointed to a lack of data and inefficient infrastructure for clinical data collection as obstacles to researchers. Many important topics typically are not emphasized by the academic community, such as the impact of novel provider payment schemes and rapid-cycle evaluations of health-care innovations. Researchers should consider payer interest because buy-in from these groups is often critical for the findings to have a substantial impact.

Resident clinician-scientists have an opportunity to influence policy and payer considerations by conducting original clinical research, evidence reviews, and economic evaluations. Research regarding health-care delivery and cost-effectiveness can address important unanswered questions and provide payers with the information that they need to make evidence-based policy decisions. Orthopaedic residency programs must take this into account when developing research curricula. This emphasis will help to develop future generations of surgeons who can work cohesively with payers to affect policy and improve health-care delivery systems.

Barriers and Recommendations

As shown below, the Clinician-Scientist Collaboration Workgroup has provided a list of perceived barriers to clinical and basic science research as well as recommendations to overcome them. Learning and understanding the process of research, including how to obtain funding, will help residents to prepare for careers as clinician-scientists, and faculty support is essential in doing so.

**Barrier:** Extramural and foundation funding is increasingly more difficult to obtain, collaborative research funding opportunities are rare, and industry funding has numerous restrictions.

**Recommendation:** Advocate for increased governmental funding and participate with foundations to solicit philanthropic donations. Utilize resources and prepared materials...
from the AAOS, the Orthopaedic Research Society (ORS), and other groups to educate legislators on the importance of scholarly activity.

**Recommendation:** Acquire funds from OREF, the American Orthopaedic Society for Sports Medicine (AOSSM), the Musculoskeletal Transplant Foundation (MTF), the Arthritis Foundation, etc. as a way to enable use of industry funding with fewer potential conflicts.

**Barrier:** Clinical productivity is generally prioritized over scholarly activity. Stronger research emphasis is needed at the departmental level.

**Recommendation:** Give appropriate monetary and time compensation to those who have received grants. Offer or schedule dedicated or protected time for research and scholarly activities. Reduce the clinical and surgical loads to allow for research time.

**Barrier:** The number of orthopaedic residents becoming clinician-scientists is declining.

**Recommendation:** Develop and cultivate new clinician investigators. Place current clinician-scientists in mentorship roles:

1. Cultivate interest (medical students and residents): Promote attendance at ORS and other research venues early in training. Offer research opportunities during medical school to increase interest and strengthen a student’s application for residency. Pair students and residents with clinician/faculty mentors. Consider working through the BOS or an existing OREF/ORS program.

2. Get first grants: Promote grant-writing workshops (such as those provided by the Clinician Scholar Career Development Program).

3. Sustain a career: Develop increased bridge funding. Work with institutions to develop funds for sustaining faculty and with departments to emphasize the value of thought leaders and researchers. Work with OREF, NIH, and the Department of Defense (DoD) on the inclusion of clinicians in proposal review panels that maximize their clinical input and minimize their time commitment.

4. Senior level: Mentor the next generation. Pair with medical students, residents, and junior-level investigators, and collaborate with midlevel investigators who are at risk for leaving research.

**Barrier:** Incorporating research into the standard residency curriculum can be difficult.

**Recommendation:** Encourage residents to do research, and work with basic scientists and clinical researchers to develop theses. Offer protected time for scholarly activities.

**Recommendation:** Establish a traveling research rotation to involve residents who are at institutions without an established research enterprise.

**Barrier:** Clinicians are not involved in NIH or other study sections. The clinical importance of proposals may not be vetted or written by the experts.

**Recommendation:** Encourage clinicians to participate in study sections at NIH institutes such as NIAMS. Consider the model of the AOSSM in providing reimbursement to clinicians to participate in study sections.

**Barrier:** Collaborations between researchers and clinicians are challenging when they are separate, and interaction is uncommon.

**Recommendation:** Collaborate with basic science programs or biomedical engineering/biochemistry departments to give basic scientists earlier interactions and professional relationships with clinicians. Facilitate interaction between orthopaedic and basic science/engineering departments or health services research departments in schools of public health in regular meetings. Consider having an orthopaedic surgeon who has retired from surgery as a mentor of basic science students, clinical research students, and/or junior faculty.

**Recommendation:** Pair residents with basic science, clinical research, and engineering graduate students to foster collaboration. Examine mechanisms to pair medical students who did not successfully match into residency positions with PhDs for a research year prior to reapplying.

**Recommendation:** Encourage young clinician-scientists to apply for NIH K awards to take advantage of NIAMS funding of up to $100,000/year toward salary, with another $30,000/year for research expenses for a 50% commitment. The OREF offers awards of $20,000/year to supplement successful K awardees. Consider NIH Loan Repayment Program funding, which provides an additional $35,000/year toward student loan repayment. Some subspecialty societies also may provide additional supplementation. Push for additional funding from OREF and other subspecialty societies to support the opportunity cost of a 50% commitment. Urge academic departments to make a financial commitment to awardees via direct salary supplementation or relative value unit (RVU) offsets.

**Summary**

As orthopaedic residents move into a new era of scholarship that emphasizes quality, cost, and health systems in addition to basic science and clinical developments, it is imperative that they learn the foundations of clinical research. The benefits of engaging in research are many. Personal gains include an increased sense of accomplishment, a better understanding of musculoskeletal anatomy, the ability to critically evaluate literature, and a stronger application for fellowship and faculty appointment. The orthopaedic community benefits through the development of new leaders who will continue to bring changes from the laboratory bench to the bedside.

We recognize that there are many challenges in promoting scholarly activity for residents, but the benefits far outweigh these. From individual program directors to national orthopaedic committees, we must partner to cultivate an academic environment that promotes resident involvement. Early exposure to the many facets of research and its impact on clinical practice will help to pique interest. Commitment to an
interesting yet feasible project early in residency and formulation of a thorough roadmap will aid in moving the project forward during busy clinical activities. To make this more accessible and sustainable, residents need adequate time and resources to complete a project and appropriate forums in which to present their findings. Additionally, a passionate mentor is an essential guide throughout the entire process.

Although not all residents will pursue careers as clinician-scientists, all orthopaedic surgeons must be well versed in the research process and in the interpretation of findings in order to stay current with clinical advances. Mentors must identify those residents who are interested in pursuing academic careers and connect them with colleagues who are interested in scholarship. This networking process will garner enthusiasm and help to create career-long collaborations, which will further benefit the field of orthopaedics.

Joan E. Bechtold, PhD
Benjamin R. Williams, MD

References

Webinars

2016-2017

1. “Performing Research as a Resident: Challenges and Opportunities”—February 16, 2016

2017-2018

1. “How to Write a Publishable Manuscript”—September 6, 2017
2. “Evidence-Based Orthopaedics”—September 14, 2017
AAOS Resident assembly research committee webinar series

Title: Evidence Based Orthopaedic Surgery (EBO)
Date: Sep 14, 2017
Audience: Orthopaedic surgery residents, fellows, early and mid career faculty
Moderator: Vahid Entezari MD
Speakers: Vahid Entezari MD, Aaron Shaw MD, David Jevsevar MD, Kurt Spindler MD, James Wright MD, Kevin Shea MD
Duration: 60-70 min
Goal is to review:
  ○ Elements of evidence based orthopaedics
  ○ How to find and assess quality of evidence
  ○ Study design issues: focus of randomized controlled trials and cohort studies
  ○ Improving quality and Value in orthopaedics
  ○ How to learn and practice EB orthopaedics during residency

Content:
  ● Introduction - Vahid Entezari, MD (5 min)
    ○ Introduction
    ○ History of EBM
    ○ 5 elements of EBM
    ○ Application of EBM to orthopaedic practice
    ○ Challenges and opportunities for practicing EBO
  ● How to assess quality of evidence - Aaron Shaw, MD (8 min)
    ○ Hierarchy of evidence
    ○ How to find evidence
    ○ How to critically appraise literature
    ○ Role and limitation of secondary publications
  ● Randomized clinical trials - James Wright, MD (8 min)
    ○ RCT, gold standard of clinical research
    ○ Current status of RCTs in orthopaedics
    ○ How to improve quality of RCTs
    ○ Examples of successful RCTs in orthopaedics
    ○ Limitations of RCTs
  ● Multicenter cohort studies - Kurt Spindler, MD (8 min)
    ○ Evolution of clinical research studies
    ○ Resurgence of multicenter cohort studies
    ○ MOON and MARS experience
    ○ Limitation of cohort studies
  ● Improving quality and value in healthcare - David Jevsevar, MD, MBA (8 min)
    ○ Dimensions of quality health care system
    ○ Tools to improve quality and process in healthcare
    ○ Role of EBO is improving quality in healthcare
  ● Implementing EBO: CPG to care pathway- Kevin G. Shea, MD (8 min)
    ○ Process of developing clinical practice guidelines
Advantages and disadvantages of CPG
Cases examples: pediatric diaphyseal femur fracture
Impact of guide development process on future directions of research

- **Practicing EBO in Residency and Beyond** - Vahid Entezari MD (5 min)
  - Why EB orthopaedics is important for residents
  - How to practice EBO during residency
  - Journal club as a vehicle to teach and practice EBO: cleveland clinic experience
  - Resident assembly and AAOS resources

- **Q&A - Expert panel** (10 min)
Webinar Title: How to Write a Publishable Manuscript
Date: September 6, 2017
Duration: 60 min
Audience: Orthopaedic surgery residents, fellows, early career faculty
Moderator: Vahid Entezari MD, Megan Wolf MD
Speakers: Vahid Entezari MD, Megan Wolf MD, Jonathan Hughes MD, Izuchukwu Ibe MD, Eric C. Makhni MD, MBA, Jeffrey Fischgrund MD

Goal is to review:
1. Step 1: Conducting a Literature Review
2. Step 2: Writing Articles
   a. Case Report and Case Series
   b. Original Research
   c. Systematic Review
3. Step 3: Getting Published and the Peer Review Process

Content:
- **Introduction**—Vahid Entezari, MD and Megan Wolf, MD (5 min)
  - What is the AAOS Resident Assembly
  - Charges of the Research Committee
  - Research Roadmap
  - Goals of the Webinar
- **Conducting a Literature Review**—Jonathan Hughes, MD (7 min)
  - Developing a search strategy
  - Critically appraising the literature
  - Building a library
  - Effective use of library citation tools (ex. Mendeley, Endnote)
- **Writing a Case Report and Case Series**—Izuchukwu Ibe, MD (7 min)
  - What are case reports and case series?
  - Review of the main sections of a case report
  - CARE Guidelines
- **Writing an Original Article**—Vahid Entezari, MD (7 min)
  - How to effectively describe your data
  - How to organize your article
  - STROBE, SRQR, and STARD Guidelines
- **Writing a Systematic Review**—Megan Wolf, MD (7 min)
  - What is a systematic review?
  - Differences between a systematic vs. literature review
  - 5 steps for writing a systematic review
  - PRISMA Guidelines
- **How to Get Your Work Published: Key to Efficiency**—Eric C. Makhni, MD, MBA (8 min)
  - Determining appropriate journal selection for submission
  - What are journal impact factors?
- Abstract submissions vs. Journal submissions
  - **Peer Review Process**--Jeffrey Fischgrund, MD (8 min)
    - How does a peer review process work?
    - What do reviewers look for in an article?
    - How to respond to reviewer feedback effectively
  - **Q&A**--Megan Wolf, MD and Vahid Entezari, MD (10 min)
AAOS Resident Assembly Research Committee - Research During Residency: Executing Now with an Eye Towards Career Development

March 31st, 2016

Moderator: Eric Makhni, MD, MBA

Panel: Eric Makhni, MD, MBA; Vahid Entezari, MD; Peter Fabricant, MD, MPH; Eric Swart, MD; Kenneth Gundle, MD; Peter Chalmers, MD

Webinar time: 8:30 to 9:30 pm ET; 7:30 to 8:30 pm CT; 6:30 to 7:30 pm MT; 5:30 to 6:30 pm PT

Program Schedule

CME Credit: 0.0

Times listed below in Central Time

7:30 pm Introductions
Vahid Entezari, MD and Eric Makhni, MD, MBA

7:34 pm Getting started – Focus your efforts
Peter Fabricant, MD, MPH

7:42 pm Choosing a track - What kind of research fits best with me?
Peter Chalmers, MD

7:50 pm Logistics – How to get it done
Eric Swart, MD

7:58 pm Nuts and bolts
Kenneth Gundle, MD

8:06 pm Long-term goals - Career Development
Eric Makhni, MD, MBA

8:14 pm AAOS Resident Assembly Research Committee
Vahid Entezari, MD

8:19 pm Q & A
Eric Makhni, MD, MBA
Public Disclosures

**Peter Nissen Chalmers, MD**: (This individual reported nothing to disclose); Submitted on: 12/02/2015

**Vahid Entezari, MD**: (This individual reported nothing to disclose); Submitted on: 10/01/2015

**Peter D Fabricant, MD, MPH**: (This individual reported nothing to disclose); Submitted on: 02/27/2016

**Kenneth Robert Gundle, MD**: (This individual reported nothing to disclose); Submitted on: 01/13/2016

**Eric C Makhni, MD, MBA**: (This individual reported nothing to disclose); Submitted on: 11/01/2015

**Eric F Swart, MD**: (This individual reported nothing to disclose); Submitted on: 01/05/2016
RESIDENT ASSEMBLY COMMITTEES – CHARGES AND GOALS

EXECUTIVE COMMITTEE:
1. Shall be the governing body of the AAOS Resident Assembly.
2. Review all AAOS Resident Assembly Committee reports and actions.
3. Reports to the Candidate, Resident, Fellows Committee.
4. Submit Resident Assembly approved actions to the Candidate, Resident, Fellows Committee.
5. Promotes the Resident Assembly among residents and residency programs.
6. Educates residents and residency programs about the Resident Assembly.
7. Provides orientation to Resident Assembly leadership and membership.

2017-2018 Goals
1. Continue to identify and develop leaders early in their training.
2. Continue to develop innovative ways to improve resident education.
3. Increase resident participation in advocacy.
4. Develop resources for medical students.
5. Develop and implement delegate communication strategy.

NOMINATING COMMITTEE:
1. Solicit applications for the following positions: Chair, Vice-Chair, At-Large Members of the Executive Committee.
2. Review the involvement, contributions, and leadership of the various Resident Assembly Committee chairs and the At-Large members of the Executive Committee to select Chair and Vice-Chair.

EDUCATION COMMITTEE:
1. Review educational resources and provide educational opportunities for residents, including
   a. Resources for OITE/ABOS preparation and
   b. Information for study symposia.
2. Provide a forum for collaborative discussion of educational issues among and between residents and the AAOS.
3. Educate residents about critical education issues.
4. Promote ideas and develop projects that advance orthopaedic education.
5. Develop, refine, and present education actions to the executive committee.

2017-2018 Goals
1. Improve Education Committee communications.
2. Improve pre-residency education for incoming interns.
3. Improve resident access to surgical courses
4. Improve fellowship search process & establish a buddy mentorship program.
5. Creation of curated reading list for orthopaedic surgery residents.
6. Improve the resident bowl.
7. Establish the model residency program concept.
HEALTH POLICY COMMITTEE:
1. Address issues affecting the field of orthopaedic surgery and orthopaedic residency training.
2. Develop, refine, and present health policy actions to the executive committee.
3. Collaborate with AAOS to promote resident engagement in political issues locally and nationally.
4. Educate residents on the Orthopaedic Political Action Committee (PAC) and current political issues impacting orthopaedics.

2017-2018 Goals
1. Develop a health policy webinar.
2. Develop a series of articles for publication.
3. Increase resident PAC participation.
4. Review the Washington Health Policy Fellows program goals and incorporate into the Resident Assembly, where applicable.

PRACTICE MANAGEMENT/CAREER DEVELOPMENT COMMITTEE:
1. Provide information on starting a career in orthopaedics, including:
   a. Fellowship opportunities
   b. Employment opportunities.
2. Develop, refine, and present practice management actions to the executive committee.

2017-2018 Goals
1. Present 3-4 webinars. Current topics include:
   • Finance 101 (7/18)
   • Investing Overview - White Coat Investor
   • Student Loan Repayment
   • Young Practitioner’s Forum
2. Publish 2 AAOS Now articles. Current topics include:
   • Coding Basics

RESEARCH COMMITTEE:
1. Promote research opportunities available to residents, including:
   a. Awards,
   b. Grants, and
   c. Sub-specialty research activities.
2. Promote the value of orthopaedic research among the orthopaedic resident community.
3. Develop, refine, and present research actions to the executive committee

2017-2018 Goals
1. Encourage involvement of members within the committee
   • Develop member-led subcommittees to develop and improve projects
   • Utilize video conferencing to encourage member participation
   • Use the AAOS Community
2. Develop and refine content for the Resident Research Toolkit
3. Promote resources to residency programs through grassroot programs and coordination with the Resident Delegates of the AAOS Resident Assembly.
4. Webinars:
   • Host two webinars
   • Identify topics and create content for two additional webinars
5. AAOS Now
   • Submit two articles
   • Identify topics and create content for two additional articles
6. Resident Committee Study
• **Question:** Can we identify certain factors that will lead to a better performance in residency to create scholarly activity?

**TECHNOLOGY COMMITTEE:**
1. Identify, develop, test or promote new technologies to facilitate resident productivity, education and optimize healthcare.
2. Develop, refine, and present technology actions to the executive committee.

**2017-2018 Goals**
1. Explore new and better ways for AAOS to engage residents with the new AAOS.org web site by providing specific feedback on current site features that could be improved to better serve residents, and suggestions on new site features that they feel would realistically improve the web site experience for residents and young orthopaedic surgeons.
2. Actively involved in the pilot study for the AAOS Community Portal which will be open to all Resident Assembly delegates and Committee members. The Committee will discuss and present specific feedback RA Committee Charges throughout the process, and make specific recommendations for changes that will increase residents’ participation in the Community after it’s formally launched.
3. Work jointly with the Education Committee to develop a potential resource guide of digital content that is most useful to residents in different stages of their residency. Additionally, the Committee will give careful consideration and specific recommendations on the most appropriate ways to deliver this content to the target audiences.
4. Engage with the AAOS on social media to support its use and gain online engagement
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<td>Wolf, Megan, MD</td>
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<td>ID: 000001277022</td>
<td>West Hartford, CT 06119-1453</td>
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| Ibe, Izuchukwu, MD    | Department Orthopaedics & Rehab   | Position: Member          | Member Class:           |
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<td>Jensen, Andrew, MD</td>
<td>Dept of Ortho Surg Rm 76-143</td>
<td>Position: Member</td>
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<td>ID: 000001316071</td>
<td>10833 Le Conte Ave</td>
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<td>Email: <a href="mailto:andrew.robert.jensen@gmail.com">andrew.robert.jensen@gmail.com</a></td>
<td>Los Angeles, CA 90095</td>
<td>Term End: 10-Mar-2018</td>
<td>Chapter:</td>
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<td>Jimenez-Almonte, Jose, MD</td>
<td>2692 Braden Way</td>
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<tr>
<td>ID: 000001425501</td>
<td>Lexington, KY 40509</td>
<td>Term Start: 28-Apr-2017</td>
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<td>Ju, Derek, MD</td>
<td>1200 N Flores St</td>
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<tr>
<td>ID: 000001534462</td>
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<td>Term Start: 14-Sep-2017</td>
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<td>Term End: 10-Mar-2018</td>
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<td>Levack, Ashley, MD</td>
<td>310 E. 71st St.</td>
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<td>London, Daniel, MD, MS</td>
<td>Department of Orthopaedics, Box 1188 5 East 98th Street, 9th Floor New York, NY 10029</td>
<td>Position: Member  Term Start: 28-Apr-2017Term End: 10-Mar-2018</td>
<td>Member Class:  Member SubClass: Chapter:</td>
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<td>Luigi-Martinez, Hiram, MD</td>
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<td>Position: Member  Term Start: 28-Apr-2017Term End: 10-Mar-2018</td>
<td>Member Class:  Member SubClass: Chapter:</td>
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<td>Position: Member  Term Start: 02-Nov-2017Term End: 09-Mar-2018</td>
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<td>Mittwede, Peter, MD</td>
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<td>Mouanoutoua, Hanson, BS</td>
<td>7524 35th Ave SW</td>
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<td>ID: 000001629789</td>
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<td>Term Start: 17-Jul-2017</td>
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<td>O'Neill, Conor</td>
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<td>ID: 000001526179</td>
<td>Roanoke, VA 24016</td>
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<td>Pareek, Ayoosh, MD</td>
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<td>Pascal, Scott, MD</td>
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<td>Term Start: 03-Jan-2017</td>
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<td>Home: (413)530-7369*</td>
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<td>Patterson, Joseph, MD</td>
<td>626 19th Ave</td>
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<td>Term Start: 25-Sep-2017</td>
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<td>Phelps, Michelle, MD, PhD</td>
<td>5616 Jackson St Unit 2212</td>
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<td>Term Start: 24-May-2017 Term End: 20-Mar-2018</td>
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<td>Term Start: 19-Jan-2018 Term End: 09-Mar-2018</td>
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<td>Shahab, Faseeh, MD</td>
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<td>Term Start: 21-Dec-2016 Term End: 10-Mar-2018</td>
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<td>Shaw, Kenneth, DO</td>
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<td>Grovetown, GA 30813</td>
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<td>Cummins, Deborah, PhD</td>
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<td>Term End: 30-Mar-2020</td>
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<td>Volland, Erin</td>
<td>9400 W Higgins Rd Ste 100 4093 Rosemont, IL 60018-4975</td>
<td>Position: Staff Liaison Term Start: 01-Nov-2014 Term End: 01-Mar-2020</td>
<td>Member Class: Member SubClass: Chapter:</td>
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</tbody>
</table>

Total Committee Members: 45
Resident Assembly - Research Committee

- Megan Rianne Wolf, MD (Chair): Submitted on: 10/10/2017
  AAOS: Board or committee member
- Ashley Anderson, MD (Member): (This individual reported nothing to disclose); Submitted on: 10/10/2017
- Mikhail Bekarev, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/23/2018
- Benjamin Maurice Braun, MD (Member): (This individual reported nothing to disclose); Submitted on: 12/27/2017
- Leonard T Buller, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/24/2018
- Jie Chen, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/24/2018
- David Clever, PhD (Member): (This individual reported nothing to disclose); Submitted on: 03/26/2017
- Vahid Entezari, MD (Member): Submitted on: 05/27/2017
  OREF: Research support
- Michael Fu, MD, MS (Member): (This individual reported nothing to disclose); Submitted on: 09/28/2017
- Jigar S. Gandhi (Member): (This individual reported nothing to disclose); Submitted on: 10/02/2017
- Gabriel R Gonzales (Member): (This individual reported nothing to disclose); Submitted on: 01/27/2018
- Ryan Elijah Harold, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/22/2018
- Takashi Hirase, MPH (Member): No disclosure available
- Jonathan D Hughes, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/08/2018
- Izuchukwu Kenneth Ibe, MD (Member): (This individual reported nothing to disclose); Submitted on: 07/11/2017
- David Ivanov, BS (Member): No disclosure available
- Andrew Jensen, MD (Member): (This individual reported nothing to disclose); Submitted on: 11/27/2017
- Jose H Jimenez-Almonte, MD (Member): Submitted on: 10/02/2017
  AAOS: Board or committee member
  American Association of Hip and Knee Surgeons: Board or committee member
- Derek Ju, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/26/2018
- Ashley Levack, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/26/2018
- Daniel London, MD, MS (Member): (This individual reported nothing to disclose); Submitted on: 10/07/2017
- Hiram E Luigi-Martinez, MD (Member): (This individual reported nothing to disclose); Submitted on: 11/15/2017
- Tianyi David Luo, MD (Member): (This individual reported nothing to disclose); Submitted on: 12/08/2017
- Gabriel Makar (Member): (This individual reported nothing to disclose); Submitted on: 06/01/2017
- Patrick Gaetano Marinello, MD (Member): Submitted on: 10/06/2017
  AAOS: Board or committee member
  American Society for Surgery of the Hand: Board or committee member
- Peter Mittwede, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/22/2018
- Hanson Mouanoutoua, BS (Member): No disclosure available
- Conor O'Neill (Member): (This individual reported nothing to disclose); Submitted on: 05/18/2017
- Ayoosh Pareek, MD (Member): (This individual reported nothing to disclose); Submitted on: 10/02/2017
- Scott Pascal, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/29/2018
• Joseph Patterson, MD (Member): (This individual reported nothing to disclose); Submitted on: 12/26/2017
• Michelle M Phelps, MD, PhD (Member): (This individual reported nothing to disclose); Submitted on: 01/08/2018
• Tahsin Mashrur Rahman, BS (Member): No disclosure available
• Russell Abbott Reeves, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/15/2018
• Kalpit Nimish Shah, MD (Member): (This individual reported nothing to disclose); Submitted on: 01/22/2018
• Faseeh Shahab, MD (Member): Submitted on: 05/30/2017
  Surgical Implant Generation Network (SIGN): Other financial or material support
• Kenneth Aaron Shaw, DO (Member): (This individual reported nothing to disclose); Submitted on: 10/06/2017
• Ahmed Siddiqi, DO (Member): (This individual reported nothing to disclose); Submitted on: 02/14/2018
• Jeffrey Gei-Hun Stepan, MD, MSc (Member): (This individual reported nothing to disclose); Submitted on: 10/06/2017
• Timothy Tan, MD (Member): (This individual reported nothing to disclose); Submitted on: 06/01/2017
• Adam Wegner, MD, PhD (Member): Submitted on: 05/31/2017
  OREF: Research support
  OTA: Research support
• Deborah Cummins, PhD (Staff Liaison): (This individual reported nothing to disclose); Submitted on: 10/03/2017
• Kristen Erickson, CAE (Staff Liaison): (This individual reported nothing to disclose); Submitted on: 10/06/2017
• Erin Lynn Ransford (Staff Liaison): (This individual reported nothing to disclose); Submitted on: 10/06/2017
• Erin Volland (Staff Liaison): (This individual reported nothing to disclose); Submitted on: 10/06/2017
Informational Items
**AAOS MANDATORY DISCLOSURE POLICY:**

Governance Groups (except Board of Directors), Continuing Medical Education Contributors, Senior Management Team Members, and Others

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**Philosophy**

In order to promote transparency and confidence in the educational programs and in the decisions of the American Academy of Orthopaedic Surgeons and the American Association of Orthopaedic Surgeons (hereinafter collectively referred to as “AAOS”), the AAOS Board of Directors has adopted this mandatory disclosure policy.

The actions and expressions of Fellows or Members providing education of the highest quality or in shaping AAOS policy must be as free of outside influence as possible and any relevant potentially conflicting interests or commercial relationships must be disclosed. Because the AAOS depends upon voluntary service by Fellows and Members to conduct its educational programs and achieve its organizational goals, this disclosure policy has been designed to be realistic and workable.

*The AAOS does not view the existence of these interests or relationships as necessarily implying bias or decreasing the value of your participation in the AAOS.*

**Who Must Disclose**

Each participant in the AAOS CME program or author of enduring materials, member of the AAOS Board of Directors, Board of Councilors, Board of Specialty Societies, Councils, Cabinets, Committees, Project Teams or other official AAOS groups (collectively “AAOS governance groups”), editors-in-chief and editorial boards and AAOS clinical practice guidelines, appropriate use criteria and performance measures development workgroups, has the obligation to disclose all potentially conflicting interests. Each participant in the AAOS CME program or author of enduring materials, AAOS governance groups, editors-in-chief and editorial boards and AAOS clinical practice guidelines, appropriate use criteria and performance measures development workgroups must disclose relevant activities or relationships through the AAOS Orthopaedic Disclosure Program.

**Responsibility of the Individual Who Discloses**

Using a uniform form approved by the AAOS Board of Directors, participants are responsible for providing information to the AAOS Orthopaedic Disclosure Program regarding the nature of their relationships with commercial entities relating to orthopaedics. Participants are responsible for the accuracy and completeness of their information. In addition, participants have an obligation to review and update their personal information in the AAOS Orthopaedic Disclosure Program at least semiannually (usually April and October). It is strongly recommended that participants note any changes to the AAOS Orthopaedic Disclosure Program as soon as possible after they occur. All orthopaedic surgeons are encouraged to participate in the AAOS Orthopaedic Disclosure Program.
Consequences for Failing to Disclose

A failure of a required participant to participate in the AAOS Orthopaedic Disclosure Program will result in the participant being asked not to participate in the AAOS CME program, the AAOS governance group, as editor-in-chief or on an editorial board and AAOS clinical practice guidelines, appropriate use criteria and performance measures development workgroups. The most current version of the AAOS Policy for a Fellow or Member Who Fails to Disclose Conflicts of Interest When Required shall govern all actions taken under this provision.

Public Disclosure of AAOS Orthopaedic Disclosure Program Information

The information in the AAOS Orthopaedic Disclosure Program shall be available to the public and to other AAOS Fellows and Members. In addition, a list of all participants in the AAOS CME program, AAOS governance group or AAOS clinical practice guidelines, appropriate use criteria and performance measures development workgroups, along with their disclosures, will be included in all meeting materials.

Disclosure of Potential Conflicts of Interests at AAOS Governance Meetings

As indicated above, a list of all participants in the AAOS governance group, along with their current disclosures, will be included in all meeting materials.

Participants in AAOS governance groups (except for the Board of Councilors and Board of Specialty Societies) have an obligation to indicate any potential conflicts they may have during discussions affecting their personal interests during the meeting of the AAOS governance group. At each meeting of the AAOS governance group, members of the group will be reminded that full disclosure must be made of any potential conflict of interest when a matter involving that interest is discussed.

The chair of the governance group shall also have the prerogative of requesting a participant to provide further information or an explanation if the chair identifies a potential conflict of interest regarding that participant. The chair shall be guided by the most current version of the Protocol for the President to Use in Handling Potential Conflict of Interest Issues Before the AAOS Board of Directors. Based on the information provided in the AAOS Orthopaedic Disclosure Program and/or upon a further review, the chair of the AAOS governance group may determine that the participant shall:

- Disclose the potential conflict and continue to participate fully in the AAOS governance group’s discussions and vote; [“Disclosure Option”]
- Disclose the potential conflict, address any questions other members of the group have on the subject, then leave the room and not participate in further discussion and vote [“Recusal from Vote option”] or
- Depart from the room until the matter has been fully discussed and acted upon. [“Recusal from Discussion and Vote option”].

If one of these actions is taken, it should be reflected in the minutes of the AAOS governance group’s meeting.

Adopted: February 2007; Revised: December 2009; February 2012

AAOS Mandatory Disclosure Policy
Page 2
AAOS POLICY FOR A FELLOW OR MEMBER WHO FAILS TO DISCLOSE CONFLICTS OF INTEREST WHEN REQUIRED

AAOS Orthopaedic Disclosure Program Background

1. Each Fellow or Member participating in an AAOS CME program, serving as an author of enduring materials, as a member of the AAOS Councils, Cabinets, Committees, Project Teams or other official AAOS groups, editors-in-chief and editorial boards or AAOS guideline development workgroups has the obligation to disclose all potentially conflicting interests through the AAOS Orthopaedic Disclosure Program.

2. Each Fellow or Member is responsible for providing accurate and complete information to the AAOS Orthopaedic Disclosure Program regarding the nature of his or her relationships with commercial entities relating to orthopaedics, which must be updated at least semiannually (usually April and October). It is recommended that participants note any changes to the AAOS Orthopaedic Disclosure Program as soon as possible after the changes occur.

3. The AAOS Orthopaedic Disclosure Policy expressly provides that “a failure of a required participant to participate in the AAOS Orthopaedic Disclosure Program will result in the participant being asked not to participate in the AAOS CME program, the AAOS governance group, as editor-in-chief or on an editorial board and AAOS guideline development.”

4. All Fellows and Members are encouraged to participate in the AAOS Orthopaedic Disclosure Program.

Directions for Handling Failure of Fellow or Member to Disclose When Required

1. Upon receipt of notice that an AAOS Fellow or Member has failed to disclose a conflict of interest when required, AAOS staff shall discuss the disclosure matter with the Fellow or Member who failed to disclose. If unsuccessful in obtaining the disclosure, AAOS staff shall then talk with the appropriate Committee/Project/Group Chair. From these discussions, AAOS staff will follow AAOS Orthopaedic Disclosure Policy in an effort to obtain the Fellow or Member’s disclosure, time permitting.
2. If unsuccessful in obtaining a disclosure, staff will prepare a summary with recommendations on handling the matter, including the following information:
   a. The identity of the Fellow or Member and his/her role within the project/program;
   b. Background on the project/program/guideline involved;
   c. Documentation on attempts to have the Fellow or Member complete the Disclosure Report; and
   d. Any materials related to known conflict(s) of interest (e.g., prior disclosures; industry website disclosure report, if available/applicable).

3. The summary will be presented to the Department Manager and/or Executive Team member for review and resolution of the disclosure issue in conjunction with the Committee/Project/Group Chair.

4. If the issue cannot be satisfactorily resolved and there is no disclosure, AAOS staff shall submit an updated summary, with supporting materials, to the Office of General Counsel. The Office of General Counsel shall determine the appropriate action for AAOS to take. The Office of General Counsel will inform the Presidential Line of any actions under consideration for failure to report. In addition, as appropriate, the Office of General Counsel will request the assistance of the Committee on Outside Interests regarding appropriate actions for failure to report.

5. All incidents of failure to disclose must be submitted to the Office of General Counsel.

6. On an annual basis, the Committee on Outside Interests will review a report developed by the Office of General Counsel documenting any and all incidents of nondisclosure within Academy programs.

The AAOS disclosure and conflict of interest processes are being developed and reviewed with the goal of transparent and appropriate decision-making. This protocol was developed to provide guidance to the various Committee/Program/Group Chairs, Editors, and appropriate staff on challenging conflict of interest issues. This protocol may be modified as other AAOS policies and procedures are developed.

 Adopted: September 23, 2011
AAOS POLICY FOR A FELLOW OR MEMBER WHO FAILS TO DISCLOSE CONFLICTS OF INTEREST ACCURATELY AND COMPLETELY

AAOS Orthopaedic Disclosure Program Background

1. Each Fellow or Member participating in an AAOS CME program, serving as an author of enduring materials, as a member of the AAOS Councils, Cabinets, Committees, Project Teams or other official AAOS groups, editors-in-chief and editorial boards or AAOS guideline development workgroups has the obligation to disclose all potentially conflicting interests accurately and completely through the AAOS Orthopaedic Disclosure Program.

2. Each Fellow or Member is responsible for providing accurate and complete information to the AAOS Orthopaedic Disclosure Program regarding the nature of his or her relationships with commercial entities relating to orthopaedics, which must be updated at least semiannually (usually April and October). It is recommended that participants note any changes to the AAOS Orthopaedic Disclosure Program as soon as possible after the changes occur.

Directions for Handling Failure of Fellow or Member to Disclose Accurately and Completely

1. Upon receipt of notice that an AAOS Fellow or Member has failed to disclose a conflict of interest accurately or completely, AAOS staff shall discuss the disclosure deficiency with the Fellow or Member. If unsuccessful at obtaining accurate and complete disclosure, AAOS staff shall then talk with the appropriate Committee/Project/Group Chair. From these discussions, AAOS staff will follow AAOS Orthopaedic Disclosure Policy in an effort to obtain the Fellow or Member’s accurate and complete disclosure, time permitting.

2. If unsuccessful in obtaining an accurate and complete disclosure, staff will prepare a summary with recommendations on handling the matter, including the following information:
   a. The identity of the Fellow or Member and his/her role within the project/program;
   b. Background on the project/program/guideline involved;
   c. Documentation on attempts to have the Fellow or Member complete the Disclosure Report accurately and completely; and
d. Any materials related to known conflict(s) of interest (e.g., prior disclosures; industry website disclosure report, if available/applicable).

3. The summary will be presented to the Department Manager and/or Executive Team member for review and resolution of the disclosure deficiency issue in conjunction with the Committee/Project/Group Chair.

4. If the issue cannot be satisfactorily resolved, AAOS staff shall submit an updated summary, with supporting materials, to the Office of General Counsel. The Office of General Counsel shall advise the President regarding the appropriate action for AAOS to take. The President of AAOS shall make the final decision regarding matters of accurate and complete disclosure.

   As appropriate, the Office of General Counsel will request the assistance of the Committee on Outside Interests in developing recommendations for the President regarding appropriate actions for failure to accurately and completely report.

5. All incidents of failure to accurately and completely disclose must be submitted to the Office of General Counsel.

6. On an annual basis, the Committee on Outside Interests will review a report developed by the Office of General Counsel documenting any and all incidents of failure to accurately and completely disclose within Academy programs.

The AAOS disclosure and conflict of interest processes are being developed and reviewed with the goal of transparent and appropriate decision-making. This protocol was developed to provide guidance to the various Committee/Program/Group Chairs, Editors, and appropriate staff on challenging conflict of interest issues. This protocol may be modified as other AAOS policies and procedures are developed.

Adopted: September, 2011
Revised: December 2011
AAOS ANTITRUST REMINDER

Discussions at meetings of the American Academy of Orthopaedic Surgeons and the American Association of Orthopaedic Surgeons (collectively “AAOS”) often cover a broad range of topics pertinent to the interests or concerns of orthopaedic surgeons. As a general rule, except as noted below, discussions at AAOS meetings can address virtually any topic without raising antitrust concerns if the discussions are kept scrupulously free of even the suggestion of private regulation of the profession. However, a number of topics that might be (and have been) discussed at AAOS meetings may raise significant complex antitrust concerns. These include:

- Membership admissions, rejections, restrictions, and terminations;
- Professional compliance actions – reprimands, censures, suspensions and expulsions;
- Adoption of and revisions to Standards of Professionalism;
- Method of provision and sale of AAOS products and services to non-members;
- Restrictions in the selection and requirements for exhibitors at the AAOS Annual Meeting or in CME activities;
- Collecting and distributing certain orthopaedic practice information, particularly involving practice charges and costs;
- Obtaining and distributing orthopaedic industry price and cost information;
- Professional certification programs;
- Group buying and selling; and
- Inclusions or exclusion of other medical societies in organizational activities or offerings.

When these and related topics are discussed, the convener or members of the AAOS group should seek counsel from the AAOS Office of General Counsel.

AAOS staff has been trained to identify potential antitrust matters. The AAOS relies on the judgment of its staff regarding these matters. AAOS urges its Board, committees and other groups not to participate in discussions that may give the appearance of or constitute an agreement that would violate the antitrust laws.

Notwithstanding this reliance, it is the responsibility of each AAOS Board or committee member to avoid raising improper subjects for discussion. This reminder has been
prepared to ensure that AAOS members and other participants in AAOS meetings are aware of this obligation.

The “Do Not’s” and “Do’s” presented below highlight only the most basic antitrust principles that may come before medical associations, like AAOS. AAOS members and staff participating in AAOS meetings should consult with the AAOS Office of General Counsel in all cases involving specific questions, interpretations or advice regarding antitrust matters.

Do Nots

1. Do not, in fact or appearance, discuss or exchange information regarding:
   a. Individual company prices, price changes, price differentials, mark-ups, discounts, allowances, credit terms, etc. or any other data that may bear on price, such as costs, production, capacity, inventories, sales, etc.
   b. Raising, lowering or “stabilizing” orthopaedic prices or fees;
   c. What constitutes a fair profit or margin level;
   d. The availability of products or services;
   e. The allocation of markets, territories or patients.

2. Do not suggest or imply that AAOS members should or should not deal with certain other persons or firms.

3. Do not foster unfair practices regarding advertising, standardization, certification or accreditation.

4. Do not discuss or exchange information regarding the above matters during social gatherings, incidental to AAOS-sponsored meetings.

5. Do not make oral or written statements on important issues on behalf of AAOS without appropriate authority to do so.

Do

1. Do adhere to prepared agenda for all AAOS meetings, ideally distributed in advance. Agendas should be sufficiently detailed to disclosure the nature of the discussions to be held. It is generally permissible for agendas to include discussions of such varied topics as professional economic trends, advances and problems in relevant technology or research, various aspects of the science and art of management, and relationships with local, state or federal governments.

2. Do require that a member of the AAOS professional staff participate in every AAOS meeting, either in person or by conference call. If any meeting is expected to deal with sensitive competitive issues, counsel from the AAOS Office of General Counsel should ordinarily be present. Committee staff should consult with AAOS legal counsel to determine whether the presence of counsel is advisable. If AAOS legal
counsel is not at the meeting, members and staff should not hesitate to consult the AAOS Office of General Counsel as necessary.

3. Do ensure that a record of all meeting, consisting of formal minutes or a memo to the file, should be made by AAOS committee staff.

4. Do object whenever meeting summaries do not accurately reflect the matters that occurred.

5. Do consult with AAOS counsel on all antitrust questions relating to discussions at AAOS meetings.

6. Do object to and do not participate in any discussions or meeting activities that you believe violate the antitrust laws; dissociate yourself from any such discussions or activities and leave any meeting in which they continue.

Special Guidelines for Collecting and Distributing Information

The collection and distribution of information regarding business practices is a traditional function of associations and is well-recognized under the law as appropriate, legal and consistent with the antitrust laws. However, if conducted improperly, such information gathering and distributing activities might be viewed as facilitating an express or implied agreement among association members to adhere to the same business practices. For this reason, special general guidelines have developed over time regarding association’s reporting on information collected from and disseminated to members. Any exceptions to these general guidelines should be made only after discussion with the AAOS Office of General Counsel. These general guidelines include:

1. Member participation in the statistical reporting program is voluntary. The statistical reporting program should be conducted without coercion or penalty. Non-members should be allowed to participate in the statistical reporting program if eligible; however, if there is a fee involved, they may be charged a reasonably higher fee than members.

2. Information should be collected via a written instrument that clearly sets forth what is being requested.

3. The data that is collected should be about past transactions or activities; particularly if the survey deals with prices and price terms (including charges, costs, wages, benefits, discounts, etc.), it should be historic, i.e., more than three months old.

4. The data should be collected by either the AAOS or an independent third party not connected with any one member.

5. Data on individual orthopaedic surgeons should be kept confidential.
6. There should be a sufficient number of participants to prevent specific responses or data from being attributable to any one respondent. As a general rule, there should be at least five respondents reporting data upon which any statistic or item is based, and no individual’s data should represent more than 25% on a weighted average of that statistic or item.

7. Composite/aggregate data should be available to all participants – both members and non-members. The data may be categorized, e.g., geographically, and ranges and averages may be used. No member should be given access to the raw data. Disclosure of individual data could serve to promote uniformity and reduce competition.

8. As a general rule, there should be no discussion or agreement as to how members should adjust, plan or carry out their practices based on the results of the survey. Each member should analyze the data and make business decisions independently.

CONCLUSION

This reminder has been written to avoid any violation of the law by AAOS members and staff and any activity that might give the appearance of illegality. However, no set of guidelines can address every possible type of inappropriate or unlawful activity. AAOS members and staff should use careful judgment to identify situation where AAOS activities, or discussions at AAOS-sponsored meetings, may violate federal or state law or may be perceived as doing so. In those cases, it is the responsibility of the member and staff to avoid these situations and consult with the AAOS Office of General Counsel when necessary.

Adopted: June 2005
Revised: December 2014
AAOS Strategic Plan: 2018 - 2022

AAOS Mission: Serving our profession to provide the highest quality musculoskeletal care.

AAOS Vision: Keeping the world in motion through the prevention and treatment of musculoskeletal conditions.

Core Values: The following values reflect our inviolable guiding principles:

- **Excellence**: Develop, encourage and reward the highest standards in all of our endeavors.
- **Professionalism**: Account for the highest professional, clinical and ethical standards to our peers, our patients and the public with integrity and transparency.
- **Leadership**: Champion the development and advancement of future leaders, through example, education and experience in our organization, our practices and the world.
- **Collegiality**: Embrace diversity and unity with our patients, our profession and our stakeholders.
- **Lifelong Learning**: Commit to professional education by advancing the science and art of orthopaedic medicine for the needs of our patients.

Strategic Domains: Each domain is equally critical to the successful achievement of the AAOS’ mission and vision:

- **Accountability**: Maintain an efficient, nimble and fiscally accountable organization responsive to member needs.
- **Advocacy**: Champion the interests of the orthopaedic profession to provide access to care and be a resourceful ally for orthopaedic surgeons and musculoskeletal patients.
- **Education**: Promote AAOS as the premier resource for orthopaedic learning.
- **Membership**: Anticipate, understand and respond to the needs of our current and future members.
- **Organizational Excellence**: Maintain an efficient, nimble and lean governance and operational organization responsive to member needs.
- **Quality and Patient Value**: Empower orthopaedic surgeons to be leaders in quality musculoskeletal healthcare teams as a means to deliver value to our patients through evidence-based cost efficient practices.

Essential Components: Each component is critical to the successful achievement of the AAOS mission and vision. The components resonate through some or all of the strategic domains:

- **Communications**
- **International Initiatives**
- **Partnerships**
- **Research**
- **Technology**
The American Academy of Orthopaedic Surgeons and the American Association of Orthopaedic Surgeons (collectively “AAOS”) expects all of its volunteers and its employees to act in accordance with the highest standards of personal and professional integrity in all aspects of their activities; to comply with all applicable laws, rules, and regulations; to deter wrongdoing; and to abide by all duly adopted AAOS policies and procedures. This AAOS Code of Ethics applies to members of the Board of Directors, Council or Cabinet Chairs, Advisory Board Chairs, Committee Chairs, the Executive Management Team, and the Senior Management Team.

This AAOS Code of Ethics is intended to supplement the AAOS Standards of Professionalism and Code of Medical Ethics and Professionalism for Orthopaedic Surgeons (for orthopaedic volunteers) and the most recent edition of the AAOS Personnel Policy Manual (for AAOS employees).

Those to whom this AAOS Code of Ethics applies agree to:

- Engage in and promote honest and ethical conduct, including the ethical handling of actual and potential conflicts of interest between personal and professional relationships;
- Recognize conflicts of interest and disclose to the Board of Directors, Council/Cabinet, or Executive Management Team (as appropriate for your position) and to the Committee on Outside Interests any material transactions or relationships that reasonably could be expected to give rise to such conflicts;
- Respect the confidentiality of information acquired in the course of your duties;
- Provide colleagues with information that is accurate, complete, objective, relevant, timely and understandable;
- Comply with applicable laws, rules and regulations of federal, state and local governments;
- Act in good faith, with due care, competence, and diligence, without misrepresenting material facts or allowing independent judgment to be subordinated;
- Assure the responsible use of and control of all assets, resources, and information in the possession of the AAOS and related organizations; and
- Promptly refer any questions about or any alleged violations of this Code of Ethics to the President of the AAOS.

The AAOS Board of Directors shall have the discretionary authority to approve any deviation or waiver from this AAOS Code of Ethics and shall determine what action, if any, is appropriate for any real or alleged violation.

**Adopted:** June 2004  
**Revised:** December 2014
FUTURE AAOS MEETINGS
2018-2021

Annual Meeting

• March 12-16, 2019 – Las Vegas, NV
• March 24-28, 2020
• March 9-13, 2021

National Orthopaedic Leadership Conference (NOLC)

• June 6-9, 2018 – Washington, DC
• June 5-8, 2019 – Washington, DC

Fall Meeting

• October 25-27, 2018 – San Antonio, TX
• October 24-26, 2019 – Nashville, TN

Note: The AAOS Travel Policy only applies to the AAOS Annual Meeting. The AAOS NOLC and the AAOS Fall Meeting have separate travel policies.
AAOS members attending the Annual Meeting are encouraged to book sleeping room reservations EARLY for the 2019 Las Vegas meeting at the Venetian/Sands Expo.

Reservations can be made online or at the 2018-19 Housing Desk located in Academy Hall B at the Morial Convention Center.

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<tr>
<th>2018 - 2019 Housing Desk</th>
<th>Date(s) &amp; Time(s)</th>
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<tr>
<td>Morial Convention Center</td>
<td>Monday, March 5</td>
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<td>Academy Hall B</td>
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<td>Tuesday, March 6</td>
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<td>Wednesday, March 7</td>
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<td>Thursday, March 8</td>
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<td><a href="https://www.wynjade.com/aaos19">https://www.wynjade.com/aaos19</a></td>
<td>March 5 – March 30, 2018</td>
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Rooms at the Venetian and Palazzo Hotels will go fast. Don’t miss out!

This offer ends March 30.